

Comment: "Critical states and fractal attractors in fractal
tongues: Localization in the Harper map"
[Phys. Rev. E64 (2001) 045204]

P. Castelo Ferreira

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In [1] the many localized phases of the Harper map were analysed, classified and organized in a hierarchical tree based on the topological winding number of the attractors corresponding to localized wave function solutions on the quantum gaps of this map.

It is relevant to remark that before the publication of [1] was publicly available the e-print [2] with a similar analysis. This e-print was withdrawn leading to two other works with distinct classifications based on the non-topological winding number [3] and on the topological winding number [4], both publicly available before the publication of [1]. Moreover the author of this comment remarks that had no knowledge of [1] prior to its publication and only actually read it after releasing the second version of [4].

References

- [1] S. Singh Negi and R. Ramaswamy, *Critical states and fractal attractors in fractal tongues: Localization in the Harper map*, Phys. Rev. **E64** (2001) 045204.
- [2] P. Castelo Ferreira, F. P. Mancini and M. Tragtenberg, *Phase Diagram Structure of the Harper Map*, `cond-mat/0006310`.
- [3] P. Castelo Ferreira, F. P. Mancini and M. H. R. Tragtenberg, *Phase Diagrams of the Harper Map and the Golden Staircase*, Phys. Lett. **A296** (2002) 91, `cond-mat/0011239`.
- [4] P. Castelo Ferreira, *Fractal Structure of the Harper Map Phase Diagram from Topological Hierarchical Classification*, `cond-mat/0011396`.